

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P556652

Luminaire Tested: **FUSL-12-4-LD4-1LO-50-UNV-93-96-EDD-90**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P556652
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSL-12-4-LD4-1LO-50-UNV-93-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

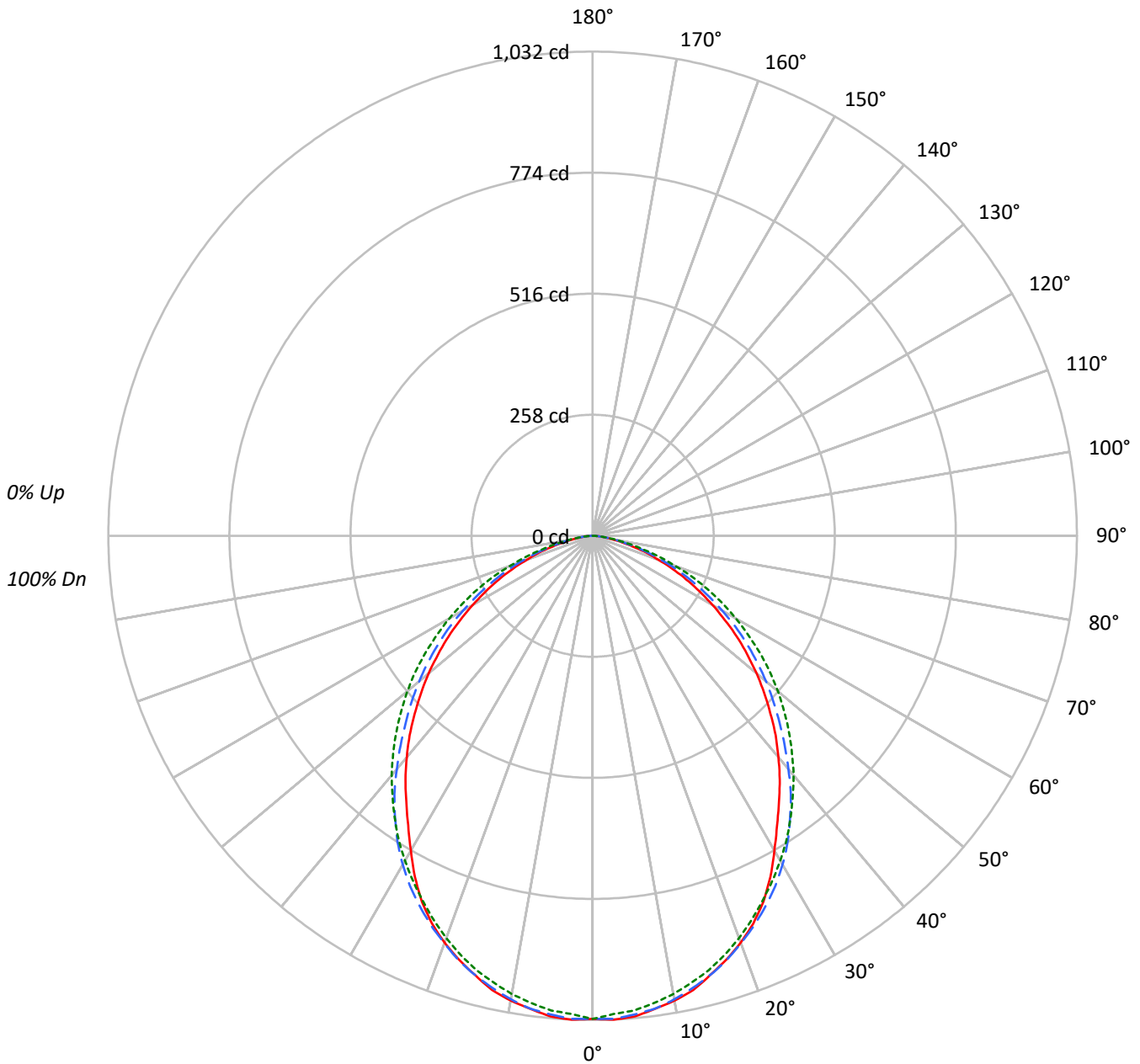
Lumens per Lamp: N/A
Luminaire Lumens: 2381.0 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2771	2771	2771
5°	2778	2767	2743
10°	2749	2741	2710
15°	2700	2700	2669
20°	2643	2646	2612
25°	2556	2588	2546
30°	2407	2515	2484
35°	2274	2411	2415
40°	2164	2281	2340
45°	2040	2142	2252
50°	1909	2019	2156
55°	1761	1878	2040
60°	1586	1714	1897
65°	1400	1524	1726
70°	1167	1298	1466
75°	917	1037	1148
80°	656	730	809
85°	426	426	404



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.0	4.1
10°-20°	272.4	11.4
20°-30°	398.0	16.7
30°-40°	451.8	19.0
40°-50°	436.1	18.3
50°-60°	359.8	15.1
60°-70°	239.6	10.1
70°-80°	107.2	4.5
80°-90°	19.2	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	767.3	32.2
0°-40°	1219.1	51.2
0°-60°	2015.0	84.6
0°-90°	2381.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2381.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1030	1030	1030	1030	1030	
5°	1028	1028	1024	1019	1016	97
15°	969	972	969	965	958	273
25°	861	868	872	865	858	394
35°	692	702	734	738	735	434
45°	536	545	563	589	592	414
55°	375	382	400	422	435	335
65°	220	226	239	256	271	218
75°	88	93	100	104	110	96
85°	14	14	14	13	13	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1029.7	1029.7	1029.7	1029.7	1029.7
2.5°	1032.5	1032.9	1030.5	1024.2	1020.2
5°	1028.5	1028.1	1024.2	1018.6	1015.5
7.5°	1017.1	1017.9	1016.7	1008.8	1004.4
10°	1006.0	1006.4	1003.2	996.9	991.7
12.5°	991.7	991.3	987.0	983.8	975.5
15°	969.2	971.6	969.2	964.8	958.1
17.5°	947.4	947.4	949.0	941.5	936.4
20°	922.9	924.1	924.1	918.2	912.2
22.5°	894.4	898.0	899.2	892.8	885.7
25°	860.8	867.5	871.5	865.2	857.6
27.5°	820.1	830.3	842.2	837.5	829.2
30°	774.6	789.6	809.4	805.4	799.5
32.5°	731.4	746.5	773.8	772.2	769.0
35°	692.3	701.8	733.8	737.8	735.0
37.5°	655.1	663.8	693.9	703.0	700.6
40°	615.9	625.4	649.2	665.4	666.2
42.5°	577.2	586.3	605.6	629.0	629.0
45°	536.0	545.1	562.9	588.6	591.8
47.5°	495.7	505.2	522.6	548.3	553.4
50°	456.1	464.8	482.2	507.1	515.1
52.5°	415.0	424.5	441.5	464.4	475.9
55°	375.4	381.7	400.3	422.5	434.8
57.5°	334.3	340.2	361.2	380.2	392.8
60°	294.7	302.2	318.5	337.8	352.5
62.5°	256.7	264.6	278.5	295.5	312.1
65°	219.9	225.9	239.3	256.3	271.0
67.5°	184.3	189.5	202.9	214.8	230.2
70°	148.3	155.1	165.0	176.4	186.3
72.5°	119.5	122.2	130.5	138.9	149.1
75°	88.2	93.0	99.7	104.4	110.4
77.5°	63.3	66.1	70.0	74.0	79.5
80°	42.3	43.5	47.1	47.9	52.2
82.5°	25.7	26.5	27.3	27.7	29.3
85°	13.8	13.8	13.8	13.1	13.1
87.5°	7.9	7.9	6.7	5.5	4.0
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)